



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,625	07/25/2001	Giovanni Traverso	Q65519	3452
7590 09/12/2005 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213			EXAMINER PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/911,625	Applicant(s) TRAVERSO, GIOVANNI	
	Examiner Hanh Phan	Art Unit 2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 04/28/2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Russell et al (US Patent No. 6,917,630).

Regarding claims 1, 6, 8, 10, 12 and 13, referring to Figures 9-20, Russell teaches a method, for virtually concatenating optical channels in WDM networks, comprising:

providing for a plurality of frames, each frame comprising a byte reserved for a concatenation flag (900, 901)(Fig. 9);

writing the same value defined in advance into the n-frame (n=1,2,3, . . .) concatenation byte (901, 902)(Fig. 9); and

transmitting the n frames through n respective channels (904, 905)(Fig. 9, see from col. 13, line 37 to col. 16, line 48).

Art Unit: 2638

Regarding claims 2, 7, 9 and 11, referring to Figures 9-20, Russell teaches a method for receiving a number n of virtually concatenated signal frames in WDM networks, the method comprising:

- receiving a first reference frame at an instant t_0 ;
- reading a concatenation byte value of such reference frame;
- receiving the remaining $n-1$ signal frames after a respective determined time t ;
- reading the concatenation byte value of the remaining $n-1$ signal frames; and
- identifying and aligning all the signal frames with the same concatenation byte value compensating for the receiving time t (see Figs. 12-20, and see from col. 14, line 22 to col. 16, line 48).

Regarding claim 3, referring to Figures 9-20, Russell further teaches the step of aligning all the signal frames with the same concatenation byte value comprises the steps of:

- receiving the remaining $n-1$ signal frames at corresponding instants t_1 ;
- calculating, for each of the remaining $n-1$ frames, the time t elapsed from the instant at which the reference frame has been received;
- providing, for every channel, an elastic store; and
- holding steady the elastic storage of the reference channel and moving the others in dependence of the calculated times t (see Figs. 12-20, and see from col. 14, line 22 to col. 16, line 48).

Regarding claim 4, referring to Figures 9-20, Russell further teaches the receiving the remaining $n-1$ signal frames comprises:

reading the frame alignment word of the reference frame at a first instant t_0 ;
reading the frame alignment word of the remaining $n-1$ frames at corresponding second instants t_1 ; and
calculating the time differences t between the first instant t_0 and the corresponding second instants t_1 (see Figs. 12-20, and see from col. 14, line 22 to col. 16, line 48).

Regarding claim 5, referring to Figures 9-20, Russell further teaches comprising:
calculating the possible differences between the concatenation byte value of the reference frame and the concatenation byte value of the remaining $n-1$ frames,
multiplying such possible differences by the frame period T , and
adding the value obtained to the respective time differences t (see Figs. 12-20, and see from col. 14, line 22 to col. 16, line 48).

Response to Arguments

4. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone

Art Unit: 2638

number for the organization where this application or proceeding is assigned is
(571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER



Replacement Sheet
Q65519 Giovanni TRAVERSO
USSN: 09/911,625 Art Unit: 2633
Conf. No.: 3452 For: VIRTUAL
CONCATENATION OF OPTICAL...
(202) 293-7060 1/4

Approved
09/02/05

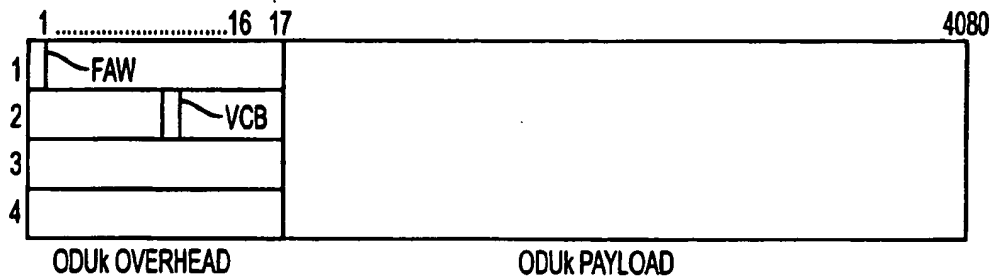


FIG. 1

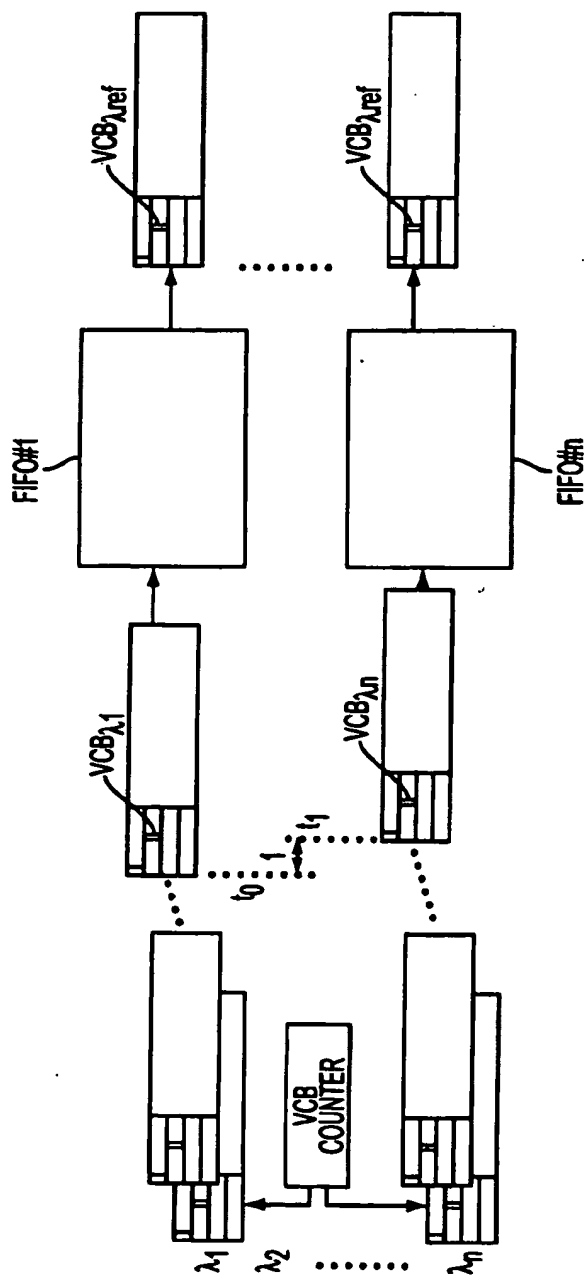


FIG. 2

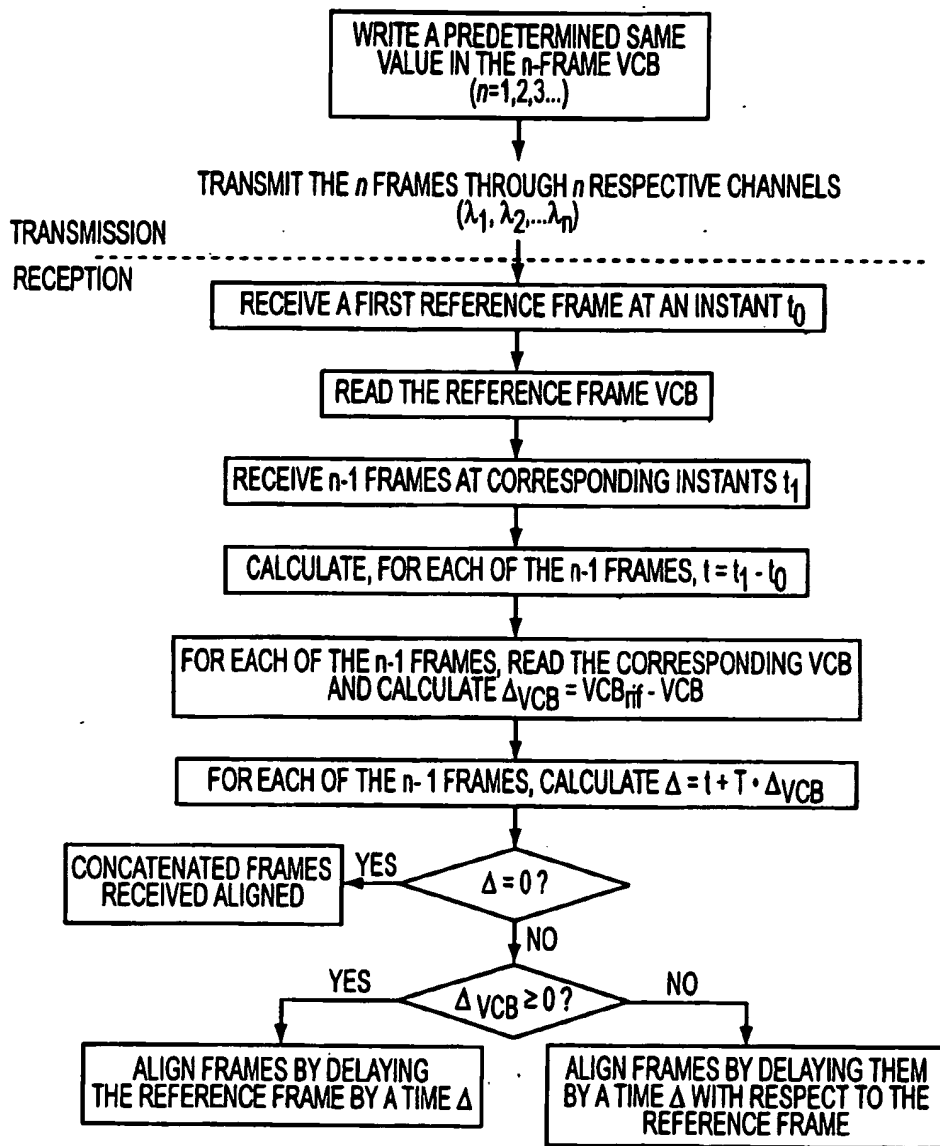
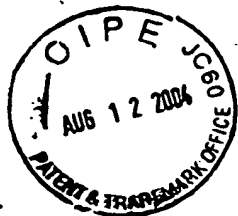


FIG. 3

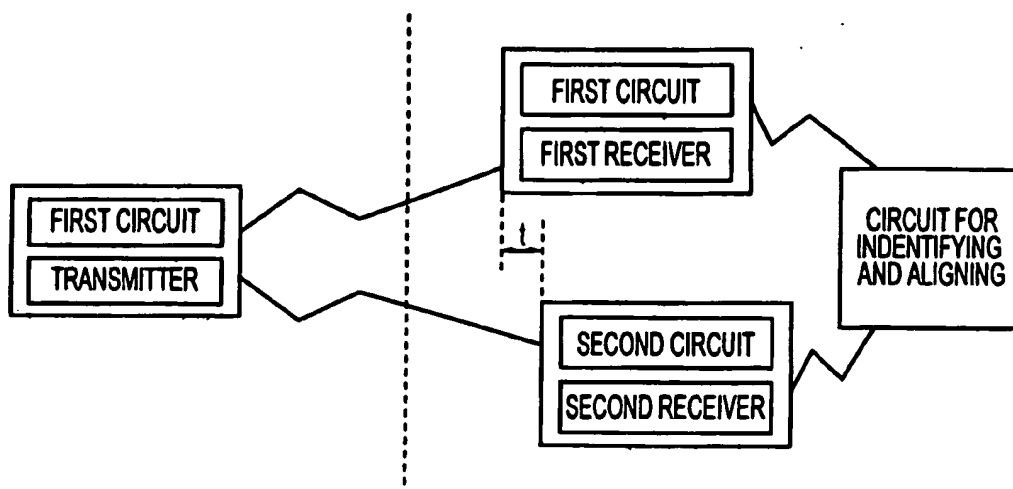


FIG. 4